



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,372	07/18/2003	Timothy Kirby	ITJ-001.01	4362
25181	7590	05/18/2007		
FOLEY HOAG, LLP PATENT GROUP, WORLD TRADE CENTER WEST 155 SEAPORT BLVD BOSTON, MA 02110			EXAMINER TERMANINI, SAMIR	
			ART UNIT 2178	PAPER NUMBER
			MAIL DATE 05/18/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/622,372

Applicant(s)

KIRBY ET AL.

Examiner

Samir Termanini

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date N/A.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

BACKGROUND

1. This NON-FINAL Office Action is responsive to the following communications: Amendment filed on 2/28/2007 .

2. Claims 1-31 are pending in this case. Claims 1, 15, 20, 24, and 31 are in independent form.

3. Applicant's arguments with respect to claims 1-4, 8-25, and 27-31 made under 35 U.S.C. 102(e) as being anticipated by Avnet et al. (US 2002/0094787 A1) in the previous Office Action (dated 11/29/06) have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's arguments with respect to claims 5-7 are under 35 U.S.C. 103(a) as being unpatentable over Avnet et al. (US 2002/0094787 A1) in view of Wall (US 20030027591 A1) in the previous Office Action (dated 11/29/06) have been considered but are moot in view of the new ground(s) of rejection.

CLAIM REJECTIONS - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2178

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4, 6, 8-9 and 13-14 are rejected under 35 U.S.C. 102(e) as being anticipated by *Bao et al.* (US PG-PUB 2005/0021393).

As to independent **claim 1**, *Bao et al.* describe(s): An apparatus for interactive media display comprising: a central controller to provide content items for display on a screen ("...server 10...", para. [0048]); a player controller ("...The display 506 can be connected to the CPU 501 to provide and/or request [transmit and/or receive] information to be displayed on the screen display 561 of the display 506...", para. [0048]) for receiving the content items from the central controller through a network ("...The billboard 20 via interface 24 can receive and download information from the remote server 10. ...," para. [0036]; see also ("...The server 10 can also remotely update the information on the billboard 20. In other words, a new vAd would not be needed if the retailer wanted to update the vAd, thereby saving the retailer time and money. ...," para. [0033]); and a screen for displaying content specified by the player controller ("...display screen 26...", para. [0026]), wherein at least one of the central controller and the player controller is responsive to a user communication device operable by a user to select the content items for display ("...The user can also download portions of a vAd or

Art Unit: 2178

a select quantity of information displayed on the display screen 26 of the billboard 20. ..., " para. [0028]).

As to dependent **claim 2**, which depends from claim 1, *Bao et al.* further disclose(s): the apparatus of claim 1 wherein the screen is a liquid crystal display ("...LCD 573 can be of the type MDLS16465-LV-LED04 (Varitronix), 16.times.4 with backlight, 5V, screen size 61.8.times.25.2, and the CPLD 575 can be of the type XC9572PQ100 (Xilinx), 72 MicroCells, 5V. ..., " para. [0049]), organic light-emitting diode display ("...LEDs... a flat panel display using organic...devices," para. [0026]), and a projection screen display ("...projection devices..., " para. [0026]).

As to dependent **claim 3**, which depends from claim 1, *Bao et al.* further disclose(s): the apparatus of claim 1 wherein the user device is a portable communication device ("...mobile platform with a display screen, to display electronic/computer-based information and become interactive..., " para. [0016]).

As to dependent **claim 4**, which depends from claim 3, *Bao et al.* further disclose(s): the apparatus of claim 3 wherein the user device is one of a mobile phone ("...mobile phone..., " para. [0027]), a GSM phone ("...cellular technology such as GSM..., " para. [0027]), a fixed line telephone ("...wired connections..., " para. [0027]), a handheld computer with wireless data capability a DTMF-generating ("...personal digital assistant (PDA), ..., " para. [0027]), apparatus associated with a telephone voice input ("...cellular..., " para. [0027]), and a remote control having an infrared (IR) transmitter ("...interact via wireless, infrared ..., " para. [0027]).

Art Unit: 2178

As to dependent **claim 6**, which depends from claim 1, *Bao et al.* further disclose(s): the apparatus of claim 1 wherein the user device generates SMS messages to directs operation of the central controller ("...short messaging services (SMS)...," para. [0027]; see also to ("...upload information to the billboard 20...," para. [0028]).

As to dependent **claim 8**, which depends from claim 1, *Bao et al.* further disclose(s): the apparatus of claim 1 wherein the central controller executes a program whose output displays at the screen ("... billboards or other devices to communicate interactively with servers 10 and various types of client devices 30. With such, the billboards or other devices can receive information from the server 10, and users can receive information upon request via their client devices 20 or by broadcast applications. ...," para. [0047]).

As to dependent **claim 9**, which depends from claim 1, *Bao et al.* further disclose(s): the apparatus of claim 1 wherein the central controller displays predetermined material when a user is not selecting content items for display on the screen ("... Displayed information can be automatically updated, deleted or changed based on the settings of the real time clock 581 of the timing unit 508. For example, the timing unit 508 can determine when the information is to be displayed and in what sequence the information is to be displayed. Changes, deletions and updates to the information may include changes to the content of information to be displayed and times that the information is displayed on the display 506. ...," para. [0053]).

As to dependent **claims 13- 14**, *Bao et al.* teach the limitations previously discussed with respect to claim 1 above, further comprising a live TV channel

("...interactive television...," para. [0027]), a pre-recorded program ("...messages...," para. [0028]), a song ("...sound...," para. [0028]), a music video ("...digital video broadcast ...," para. [0032]), and a still image ("...digital images ...," para. [0028]).

7. **Claims 15–25, and 27–31** are rejected under 35 U.S.C. 102(e) as being anticipated by *Avnet et al* (US 2002/0094787 A1).

As to independent **claim 15**, *Avnet et al.* teach a method for interactive media display comprising: providing a plurality of content items organized as a playlist ("predetermined schedule...day parting[,] and other similar broadcast and media scheduling schema" para. [0026]); causing sequential display of the items on a screen (e.g. "series of posters advertising the films currently being shown " para. [0014]); receiving a command from a remote source ("receives the data" para. [0008]); processing the received command ("interpret the message" para. [0008]); and displaying a new content item in response to the received command ("additional text and information that the user can view immediately" para. [0024]).

As to dependent **claim 16**, *Avnet et al.* further teach providing a content item to a user device in response to the received command ("provide the viewer with further information if the viewer requests further information" para. [0005]).

As to dependent **claim 17**, *Avnet et al.* further teach the provided content item is graphics ("photos" para. [0002]).

As to dependent **claim 18-19**, *Avnet et al.* further teach the content item displayed in response to the received command is provided to a second screen (e.g. "personal handheld electronic device such as a PDA [or] a cell phone" para. [0006]).

As to independent **claim 20**, *Avnet et al.* teach an apparatus for the generation of an interactive media display comprising ("User[s] interact with and receive information from a [d]isplay [t]o a personal hand held electronic device such as a PDA, [or] cell phone..." see Abstract): a content system for the creation of a playlist of content items ("predetermined schedule...day parting[,] and other similar broadcast and media scheduling schema" para. [0026]); a network interface for providing the playlist to a display system ("over an electronic communications network" para. [0008]); and a display system comprising: a central controller to provide content items for display on a screen; a player controller for receiving the content items from the central controller through a network ("transceiver mounted on or embedded or near in the display" para. [0006]; i.e. "through a hardwired interface, or through a secondary wireless transceiver." para. [0009]); and a screen for displaying content specified by the player controller ("the user to interact with the display and select the additional data that the user wishes to receive." para. [0005]).

As to dependent **claim 21**, *Avnet et al.* further teach the apparatus of claim 20 wherein the playlist is transmitted to the central controller for storage ("dynamic messaging to be controlled from a centralized location and ties the individual EBB transceivers into a network." para. [0009]).

As to dependent **claim 22**, *Avnet et al.* further teach a second screen for the provision of content items selected by a user (e.g. "promotional display" para. [0015]).

As to dependent **claim 23**, *Avnet et al.* further teach the second screen is mounted on a mobile phone device ("display...to a personal handheld electronic device such as a...cell phone..." para. [0006]).

As to independent **claim 24**, *Avnet et al.* teach an apparatus for interactive media display comprising ("the viewer or user interact[s] with the item displayed" para. [0005]): a player controller in communication with a network the player controller receiving content items transmitted from a remote database server ("A network server 30 located at a central location transmits information to each of the transmission devices 12 either through network 32 which can be a hardwired interface or a secondary wireless transceiver which is a part of the transmission device 12." para. [0026]); a screen ("the display" para. [0006]) in communication with the player controller, the screen displaying the received content items ("advertisements, presentations, solicitations, purchasing suggestions, photos, video clips, audio text files, brochures, maps, coupons, and similar "contextually sensitive" content which is related to the underlying display." para. [0002]); a user device for selecting a content item from a menu of content items displayed on the screen ("personal handheld electronic device such as a PDA [or] a cell phone" para. [0006]); and a computational module that receives information from the user device and selects a content item for display on the screen in response to the received information ("the user to interact with the display and select the additional data that the user wishes to receive." para. [0005]).

As to dependent **claim 25**, *Avnet et al.* further teach a locker module for storing previously requested content items ("The EBB can record a log of the recipients of its message" para. [0012]).

As to dependent **claim 27**, *Avnet et al.* further teach the information received from the user device includes a start time ("controlled by reference to time" para. [0025]) and a reception channel for the desired content (e.g. channels: "[1] exhibits [2] communicate with one another, either in real time or in archived commentary on the various exhibits [3] obtain maps of the museum [4] go to the museum store..." para. [00]).

As to dependent **claim 28**, *Avnet et al.* further teach a second screen for the provision of content items selected by a user (e.g. "promotional display" para. [0015]).

As to dependent **claim 29**, *Avnet et al.* further teach the second screen is mounted on a mobile phone device.

As to dependent **claim 30**, *Avnet et al.* further teach the second screen is mounted on the user device ("display...to a personal handheld electronic device such as a...cell phone..." para. [0006]).

As to independent **claim 31**, *Avnet et al.* further teach a method for interactive media display comprising ("the viewer or user interact[s] with the item displayed" para. [0005]): indicating, on a display screen, a plurality of selectable content items ("selected from a menu" para. [0028]); receiving a transmission over a network in response to a command transmitted by a portable communication device, the transmission including a specification of at least one of the content items ("over an electronic communications network" para. [0008]); and facilitating display of the at least one content item on a display device associated with the portable communication device ("dynamic messaging to the transmission devices 12 which can be device specific..." para. [0026])(emphasis added).

CLAIM REJECTIONS - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 5 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Bao et al.* (US PG-PUB 2005/0021393) in view of *Wall* (US 2003/0027591 A1).

As to dependent **claims 5 and 7**, both depending from claim 1, *Bao et al.* taught the apparatus of claim 1 address in detail above. *Bao et al.* does not say that the client device uses DTMF or MMS to direct operation of the central controller. *Wall* teaches using DTMF tones ("DTMF tones to server 30" para. [0061]), SMS messages ("SMS may be used to send this information." para. [0061]), or MMS ("Multimedia Messaging Service MMS" para. [0023]) for remote controlling. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used DTMF tones, SMS messages, or MMS for remote controlling as taught by *Wall* with the *Bao et al.* because *Wall*: (1) is in the same field of endeavor ("methods and systems that allow an operator to distribute messages having aural or visual content that is generated by the operator using handheld apparatuses such as mobile telephones." para. [0001]); (2) is directed to a solution of the same problem ("a server system that receives one or more signals from a handheld apparatus generated under control of an operator of the

handheld apparatus" para. [0008]); and (3) expressly suggests the desirability and motivation for using DTMF/SMS/MMS remote controlling ("The notification method is suitable for delivery to essentially any type of apparatus including conventional telephones, but it is especially suitable for delivery to cellular telephones by way of SMS, for example..." para. [0047]). The motivation is reciprocated in *Bao et al.* – suggesting similar type of technology should be used "...The client interface 33 of the client device 30 allows the user or customer to interact via wireless, infrared and/or wired connections, or the like with the billboard 20. Wireless connections can include, for example, short messaging services (SMS) or a data service on an appropriate cellular technology such as GSM, Bluetooth (short range RF technology), infrared, IrDA or the like....," para. [0027]).

10. **Claims 10–12** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Bao et al.* (US PG–PUB 2005/0021393) in view of *Avnet et al.* (US 2002/0094787 A1).

As to dependent **claims 10–12**, *Bao et al.* further teach the limitations previously discussed with respect to claim 1 above. *Bao et al.* do not clearly show a second screen for the receipt of content items selected by a user via the user device/mobile phone. *Avnet et al.* is cited for teaching a second screen for the receipt of content items selected by a user via the user device (".... He has the option to purchase his tickets electronically with his PDA, and if he so chooses, is provided with an e-coupon for a discount at the concession stand. Alternatively, the EBB may deliver text describing the movie, favorable reviews, even short video or audio clips directly to the

Art Unit: 2178

PDA, which may be viewed directly on the PDA with no need to access the Internet....," para. [0014]; e.g. "...that displays a map ...," para. [0011]) mounted on a mobile phone device ("display...to a personal handheld electronic device such as a...cell phone..." para. [0006]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used a display in the user device as taught by *Avnet et al.* with the user device in *Bao et al.* because *Avnet et al.* suggests a second display to solve *Bao et al.*'s information exchange problem ("...It is desirable to provide a ready and efficient method and apparatus to facilitate the exchange of information between viewers and those sponsoring the displays, be they promoters, advertisers, public interest entities, museums and the like....," para. [0005]).

8. **Claim 26** is rejected under 35 U.S.C. 103(a) as being unpatentable over *Bao et al.* (US PG-PUB 2005/0021393) in view of *Walsh et al.* (US 20030050058 A1).

As to dependent **claim 26**, *Bao et al.* teach the apparatus of claim 24, addressed above. *Bao et al.* do not expressly disclose the information received from the user device is provided in XML format. However, *Walsh et al.* teach it is known in the art for information received from user devices for dynamic content delivery systems are provided in XML format ("Some content description schemes suitable for the DCDS application include...XML or the like, as are known in the art." para. [0104]). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the XML as taught by *Walsh et al.* with the user device taught by *Bao et al.* because, in the same field of endeavor, *Walsh et al.* is directed to the same particular problem of "...establishing a dynamic content delivery system [in a] mobile

Art Unit: 2178

communications unit [t]o communicate with a server in order to make a request for the delivery of specific content, such as a song, video, or the like, to a separate output device, such [as] a display screen, or the like." (Abstract) and expressly suggests XML's use is desirable and advantageous because of its ease of readability ("Ideally the descriptions should be machine understandable, not only machine-readable." para. [0104]).

RESPONSE TO ARGUMENTS

11. Applicant's arguments pp.7-8, filed 2/28/2007, with respect to claims 1-4, 8-25, and 27-31 made under 35 U.S.C. 102(e) as being anticipated by Avnet et al. (US 2002/0094787 A1) in the previous Office Action (dated 11/29/06) have been considered but are moot in view of the new ground(s) of rejection.

12. Applicant's arguments pp.7-8, filed 2/28/2007, with respect to claims 5-7 are under 35 U.S.C. 103(a) as being unpatentable over Avnet et al. (US 2002/0094787 A1) in view of Wall (US 20030027591 A1) in the previous Office Action (dated 11/29/06) have been considered but are moot in view of the new ground(s) of rejection.

13. Applicant's arguments pp.7-8, filed 2/28/2007, with regard to the clarity of the teaching in *Avnet et al.* of a display screen (within the meaning of the claims) vs. static display is persuasive.

CONCLUSION

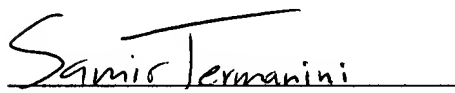
14. All prior art made of record in this Office Action or as cited on form PTO-892 notwithstanding being relied upon, is considered pertinent to applicant's disclosure.

Therefore, Applicant is required under 37 CFR §1.111(c) to consider these references fully when responding to this Office Action.

15. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samir Termanini at telephone number is (571) 270-1047. The Examiner can normally be reached from 9 A.M. to 6 P.M., Monday through Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Samir Termanini
Patent Examiner
Art Unit 2178


STEPHEN HONG
ADVISORY PATENT EXAMINER